

DREDGING WINDOWS WORKSHOP SUMMARY

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EXECUTIVE SUMMARY

Introduction and Background

Environmental windows are commonly used as a management tool to minimize potential adverse impacts of dredging on a number of important finfish and shellfish species in New York and New Jersey waters. In general, the windows are set using a policy that emphasizes risk avoidance when possible, risk management when avoidance is not possible, and lastly, mitigation when necessary to offset unavoidable impacts. Federal and state resource agencies involved in dredging follow this policy of risk avoidance, management, and mitigation. However, concerns for an increasing number of species have been steadily shrinking the time frames during which dredging is allowed. The New York District of the U.S. Army Corps of Engineers (USACE) and the New York State Department of Environmental Conservation (NYSDEC) agreed that the process of setting windows on dredging projects needs to be improved and initiated an effort to review information used to set the windows and examine the feasibility of modifying or adapting the procedure.

In support of this effort, New York Sea Grant (NYSG), Stony Brook University, USACE and NYSDEC held a day-long Workshop on fisheries dredging windows in New York City on November 30, 2011 that brought federal and state agencies' representatives together with technical experts to:

- Examine the existing windows when dredging is allowed for the inlets and bays of the south shore of Long Island, the New York/New Jersey Harbor and Lower Hudson River,
- Review the relevant biological and engineering technical information presently used to set the windows, and
- Discuss the possibility of adjusting or modifying the periods when dredging can occur based on available information.

This report contains a detailed summary of the discussions at the Workshop. The major Workshop findings and recommendations for addressing some of the key issues are provided below.

Key Workshop Findings

- Dredging windows are intended to be a tool to protect living resources from unacceptable damage, but generic fisheries windows based on risk avoidance are no longer workable because they restrict dredging time frames to the point where it becomes extremely difficult to perform required dredging. Under an approach based more on risk management, windows could be adjusted if regulators have sufficient information to decide that a project will not cause unacceptable damage. This evaluation has to be done on a project-specific basis. For each project, information on the environmental setting and operational details must be provided by USACE so that NYSDEC can assess the level of impact. To do this, USACE needs to know from NYSDEC the species and impacts of concern for a particular project.
- A move from considering only risk avoidance to considering risk management in setting dredging windows would require increased communication and an elevated level of dialogue between/among the agencies. Coordination needs to begin earlier in the process. Early coordination will help identify the critical operational constraints (such as project duration, rate of material removal, sediment type, etc.) and environmental impacts (such as potential turbidity levels, the size of the plume, etc.), as well as the fisheries of concern for particular projects. Early coordination can focus information needs and increase efficiency in the decision making process.
- Limited NYSDEC staff resources available to work on dredging windows is a major obstacle to achieving the level of interagency dialogue and coordination needed to successfully incorporate a risk management approach in setting dredging windows.
- The major impacts of dredging on fisheries resources are thought to be associated with the resuspension of sediment. The Workshop group identified the following as the priority species of concern for setting dredging windows in the area of interest (New York Harbor, south shore bays and inlets): American eel, Atlantic menhaden, Atlantic sturgeon, blue crab, blackfish, hard clam, horseshoe crab, lobster, river herring, summer flounder, weakfish, and winter flounder. The specific species of concern must be tailored to particular sites, seasons, and operations and may change over time depending on stock status and public interest.
- The more information that is available, the easier it is for NYSDEC to assess the impact of a project and make a decision regarding possible adjustment of the dredging windows. This includes information on both the technical aspects of dredging operations and the relevant biological and environmental information. Information NYSDEC would like to have to make this evaluation includes:
 - Sediment type,
 - Type of dredge used,
 - Area and scope of impact,
 - Turbidity plume characteristics,
 - Specifics of dredging operations and logistics (e.g. pipeline layout, suction speeds, daily dredge capacities),
 - Habitat type (sediment type, presence of vegetation), and
 - Currents.

Much, but not all, of this information can be found in the Essential Fish Habit (EFH) assessment document prepared for NOAA National Marine Fisheries Service (NMFS). The EFH assessment does include information such as organisms found in the area. NYSDEC presently does not receive EFH material developed for specific projects. Some operational information is also included in Water Quality Certification (WQC) materials USACE prepares for the state.

- The matrix of species, life stages of concern, and dredging stressors developed for the Workshop is a useful and important tool to facilitate decision making regarding dredging windows, but it is incomplete. Completing the biological component (including the dredging stressors) and developing a matrix that includes information on dredging technologies and impacts (e.g., plume characteristics for different equipment, sediment types, and physical environments based on USACE field and model studies) would provide a framework that could help identify mutually agreeable options for dredging projects more quickly. It was recognized that there are a large number of variables involved and the engineering portion of matrix should not replace or reduce needed dialogue between the agencies. Completing and maintaining the matrix would take some effort. No resources have been identified to undertake this task.

Recommendations

- New York State should form a team within the NYSDEC that would be committed to focus specifically on environmental and regulatory issues associated with dredging in both the New York/New Jersey Harbor and Long Island marine waters. An immediate responsibility of this team should be to work with USACE to evaluate incorporating risk management into the windows setting process. This would require either reallocating existing resources to this task or providing new resources to staff the team. Adding dredging responsibilities to existing staff positions will not resolve the problem.¹
- NYSDEC and USACE should identify mutually-agreeable mechanisms to foster earlier coordination on dredging projects, increased sharing of technical and environmental information, and better communication between agencies. They must also commit the staff resources necessary to implement these measures.
- USACE should arrange to routinely provide NYSDEC staff involved in permitting of, or setting windows for, dredging projects with the Essential Fish Habitat assessment document USACE prepares for NMFS. NYSDEC should also arrange for these staff to receive Water Quality Certification materials USACE prepares for the NYSDEC for use in conducting assessments.

¹In July 2012, NYSDEC announced the creation of a dredging team for the Port of New York and New Jersey. The team's regulatory review is focused on dredging in New York/New Jersey Harbor but it may have involvement in broader marine dredging issues in areas outside of the Harbor.

- NYSDEC should allocate resources to complete and maintain the biological portion of the Dredging Windows Fisheries Information Matrix developed for the Workshop and USACE should work with NYSDEC to expand the matrix to include technical information on the engineering aspects of dredging operations that NYSDEC needs to facilitate the dredging permit decision-making process. This can be done by the agencies involved or by outside experts if funding is available.